

DOUGLAS AIRCRAFT COMPANY

MCDONNELL DOUGLAS



DC-10

SERVICE BULLETIN

REVISION TRANSMITTAL SHEET

Bulletin 25-163

DC-10 SC 1853

EQUIPMENT/FURNISHINGS - Passenger Compartment - Modify Partition Vertically Mounted Emergency Oxygen Boxes.

This page transmits Revision 1 for DC-10 Service Bulletin 25-163 to incorporate the following changes:

NOTE: Discard only those pages of previously issued bulletin which are affected by this revision and replace with attached pages.

Reason for Revision: To delete 14 operators and associated aircraft from Service Bulletin Effectivity not affected by this modification. No additional work is required by this revision.

Pages 1 Deleted operators AM, AZ, IB, KE, KL, LH, PK, QC, RG, RK, SN,
thru 3: SR, TE, and UT

NOTE: The affected operators should make the appropriate correction to the Service Bulletin Summary, as required, to incorporate the intent of this revision.

ECL
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June 11/74

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Revision 1 November 8/74

DOUGLAS AIRCRAFT COMPANY

MCDONNELL DOUGLAS



DC-10

3855 Lakewood Boulevard
Long Beach California 90801

BULLETIN 25-163
DC-10 SC 1853

SERVICE BULLETIN

EQUIPMENT/FURNISHINGS - Passenger Compartment - Modify Partition Vertically
Mounted Emergency Oxygen Boxes.

1. Planning Information:

A. Effectivity:

(1) Aircraft Affected:

Model DC-10, Series 10, 30, and 40

<u>Operator</u>	<u>Factory Serial No.</u>	<u>*Mfr's Fuselage No.</u>
AA	46500 46502 thru 46525	1 3, 5, 7, 9, 12, 13, 20 thru 24, 30, 31, 37, 48, 49, 51, 52, 54 thru 56, 58, 65, and 72
CO	46900 thru 46904 47800 thru 47806	34, 40, 41, 43, and 44 92, 98, 101, 139, 142, 145, and 148
DL	47965 thru 47969	59, 64, 67, 74, and 80

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<u>Operator</u>	<u>Factory Serial No.</u>	<u>*Mfr's Fuselage No.</u>
LT	46727 46905 and 46906	83 47 and 50
MH	46891	127
NA	46700 thru 46703 46706 thru 46712	14, 16, 18, and 19 38, 61, 62, 68, 70, 105, and 106
NW	46750 thru 46767	28, 36, 53, 66, 79, 97, 102, 108, 111, 113, 120, 124, 126, 128, 130, 143, 151, and 161
OV	46825 and 46826	81 and 109
TK	46705 46907	33 78
TV	46800 thru 46802	96, 103, and 110
UA	46600 thru 46624	4, 6, 8, 10, 11, 15, 17, 25 thru 27, 32, 35, 39, 42, 45, 76, 86, 89, 118, 119, 138, 140, 144, 154, and 155

<u>Operator</u>	<u>Factory Serial No.</u>	<u>*Mfr's Fuselage No.</u>
WA	46908 46928 thru 46930 46938	95 104, 107, and 112 153

Affected aircraft other than those listed above will be modified prior to delivery or included in a subsequent revision to this Service Bulletin.

*Manufacturer's fuselage numbers are applicable to affected aircraft at time of Service Bulletin issue and are for reference only.

(2) Spares Affected:

None.

B. Reason:

One operator and DAC personnel have reported instances of the vertically mounted passenger emergency oxygen doors not dropping through the full 180-degree deployment. This condition is attributed to difficulty in achieving proper door hinge adjustment. If not modified, the door may not fully deploy, restricting the passage space between the partition and passenger seating. Replacing the oxygen box hinges with hinges that permit adjustment of the door without removal of the box assembly from the partition cavity, will facilitate adjustment and ensure full 180-degree deployment of door.

C. Description:

This modification accomplishes the following at each vertically mounted emergency oxygen box on the divider partitions, galley bustles, and coatrooms, as applicable:

- (1) Replaces oxygen box hinges.
- (2) Installs inserts in partition.

D. Compliance:

It is recommended this modification be incorporated at first convenient structural check period, but not to exceed 4000 flight-hours after receipt of this Service Bulletin.

E. Approval:

This Service Bulletin is FAA approved.

F. Manpower:

This modification may be accomplished in approximately 1.5 man-hours or 1.5 elapsed hours per oxygen box assembly.

For scheduling maintenance purposes each box assembly may be modified independently at different time periods.

NOTE: This Service Bulletin assumes that the aircraft/unit has been placed in a maintenance status. The man-hour/elapsed time estimates do not include:

1. Preparation for the modification: Examples; defueling, purging, placing work stands, opening standard access doors, obtaining tools, and jacking when jacking is not essential to the modification.
2. Nonproductive elapsed time: Examples; sealant or adhesive cure time, cleaning, paint drying time, lunch and/or rest periods, and quality assurance inspections.
3. Administrative functions: Examples; planning, engineering liaison, parts requisition, shift change coordination, and report writing.

Operators should take the above into consideration when scheduling this modification.

G. Material - Cost and Availability:(1) Aircraft:

Parts and materials required to accomplish this modification are listed in paragraph 3.A and are to be procured as indicated. Parts with unit net prices are proprietary parts and must be purchased as end item spares from the Douglas Aircraft Company under the spare parts article of the purchase agreement. Unit net prices are subject to change by current pricing policies. Parts will be available in approximately 180 days after receipt of purchase order.

The purchase order must specify this Service Bulletin number and only parts listed herein. Direct purchase order to:

Douglas Aircraft Company
P.O. Box 1771
Long Beach, California 90801
Attn: Parts Sales - Commercial 7-21

(2) Spares:

Not applicable.

H. Tooling - Price and Availability:

None.

I. Weight and Balance:

None.

J. References:

(1) This Service Bulletin may be accomplished in conjunction with DC-10 Service Bulletins 35-7 and 35-12 due to proximity of modification area.

(2) Data used in preparation of this Service Bulletin:

<u>Data Identification</u>	<u>Change</u>	<u>Type of Data</u>
AWE7137	M	Advance E.O.
AWE7510	F	Advance E.O.
AWE7596	F	Advance E.O.
AWE7710	C	Advance E.O.
AWE7744	B	Advance E.O.
AWE7783	B	Advance E.O.
AWE8199	D	Advance E.O.
DPS 1.902, Type 2, dtd 5-21-73	L	Douglas Process Standard
MM Chapter 35		Maintenance Manual

K. Publications Affected:

The modification outlined in this Service Bulletin affects the following DAC DC-10 aircraft publication.

<u>Publication</u>	<u>Chapter and/or Section</u>
Illustrated Parts Catalog	25-22



2. Accomplishment Instructions:

WARNING: TO AVOID INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT, MAKE CERTAIN ADEQUATE PRECAUTIONS ARE TAKEN WHILE PERFORMING ANY WORK IF ELECTRICAL POWER IS APPLIED TO THE AIRCRAFT.

USE CAUTION WHEN OPENING EMERGENCY OXYGEN DOORS NOT TO PULL OXYGEN GENERATOR FIRING PIN LANYARDS. IF OXYGEN GENERATORS ARE ACTIVATED, THE CASE TEMPERATURES MAY REACH 547° FAHRENHEIT.

CAUTION: ELECTRICALLY GROUND THE AIRCRAFT.

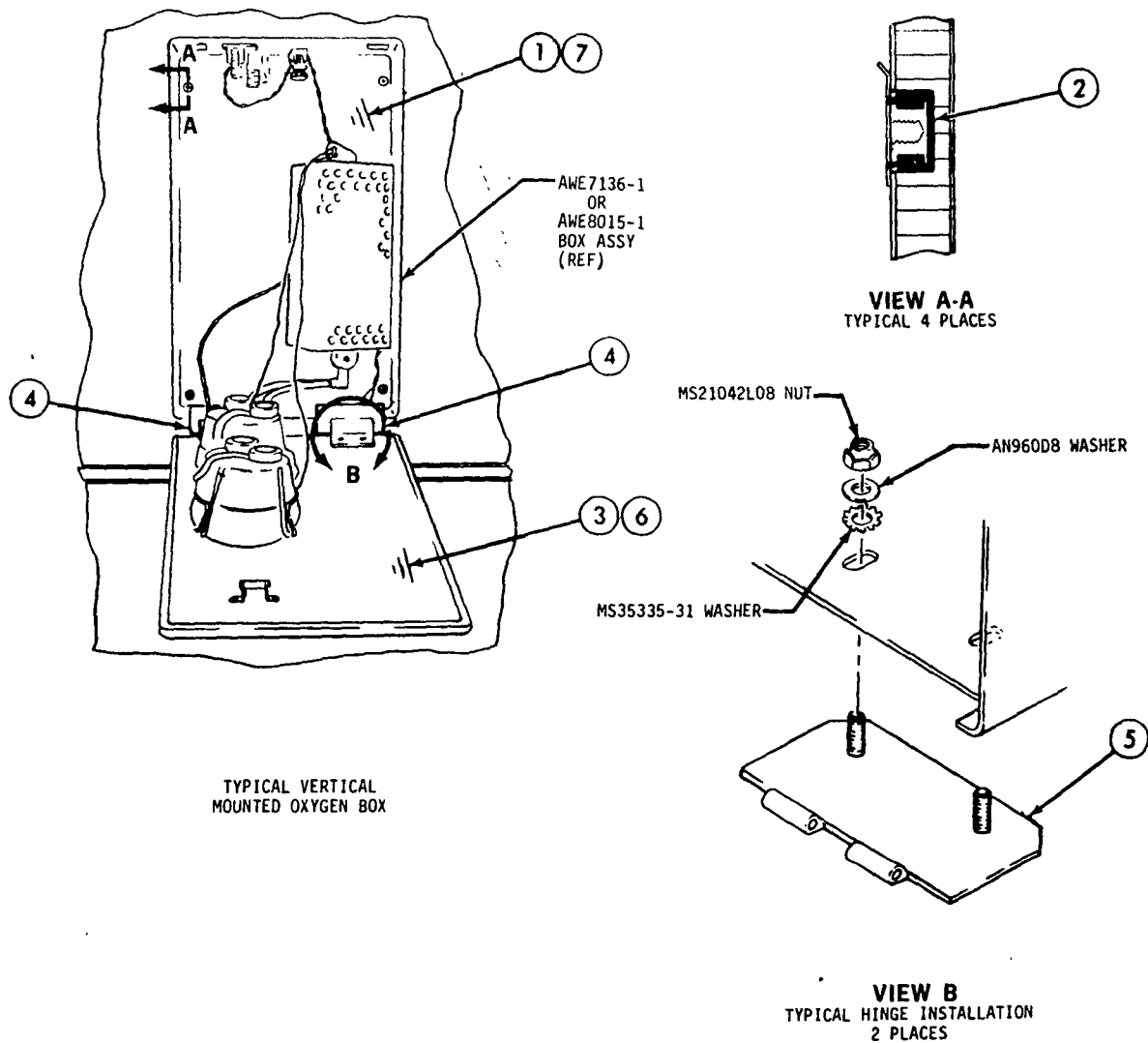
NOTE: Chapters within parentheses refer to sections of the Maintenance Manual.

Only vertically mounted emergency oxygen boxes, located in divider partitions, galley busters, and coatrooms, as applicable, are affected by this modification.

Instructions are typical for each emergency oxygen box assembly.

- A. Gain access to vertically mounted emergency oxygen module, located in divider partition, galley bustle, or coatroom, as applicable, by manually releasing door latching mechanism. (See Chapter 35-20-00.)
- B. Disconnect and tag electrical leads of latching mechanism from system wiring, install safety cap on oxygen generator firing pin, and remove and stow oxygen masks. (See Chapters 35-21-01, 35-22-01, and 35-22-02.)
- C. Install new oxygen box assembly attachments and hinges as shown on Figure 1.
- D. Install oxygen masks, connect electrical leads, and remove firing pin safety cap.
- E. Adjust hinge for alignment and full 180-degree downward deployment of door.
- F. Close emergency oxygen module door.

CAUTION: ENSURE THAT LANYARD AND OXYGEN SUPPLY HOSES FOLD WITHOUT KINKS OR TWISTS, OR ARE NOT CRIMPED IN DOOR.



NOTE: THE FOLLOWING INSTRUCTIONS ARE TYPICAL FOR EACH VERTICALLY MOUNTED PARTITION EMERGENCY OXYGEN BOX ASSEMBLY.

- ① REMOVE AND RETAIN EMERGENCY OXYGEN BOX ASSEMBLY FROM PARTITION RECESS. DISCARD ATTACHING PARTS.
- ② INSTALL FOUR SL607-08-75 INSERTS IN PARTITION AS FOLLOWS:
 - a. DRILL OUT FOUR EXISTING HOLES IN PARTITION TO .453/.458-INCH DIAMETER TO A MINIMUM DEPTH OF .397 INCH.
 - b. INSTALL INSERTS USING SLE3009 CASTING COMPOUND. (SEE DOUGLAS PROCESS STANDARD 1.902, TYPE 2.)
- ③ REMOVE DOOR FROM OXYGEN BOX ASSEMBLY. RETAIN HINGE PINS.
- ④ REMOVE TWO AWE7133-11 HINGES AND ATTACHING PARTS.
- ⑤ INSTALL TWO AWE7133-13 HINGES USING FOUR MS35335-31 WASHERS, AN960D8 WASHERS, AND MS21042L08 NUTS.
- ⑥ INSTALL DOOR ON OXYGEN BOX ASSEMBLY USING RETAINED HINGE PINS.
- ⑦ INSTALL OXYGEN BOX ASSEMBLY IN PARTITION RECESS USING FOUR AN960D8 WASHERS AND NAS5302-6 SCREWS.

VERTICALLY MOUNTED OXYGEN BOX - MODIFICATION

3. Material Information:

A. The basis for the following material data is per vertically mounted emergency oxygen box assembly.

(1) Parts to be purchased as end item spares.

NOTE: Quantity of hinge assemblies required per aircraft to be determined by the operator.

<u>New Part No.</u>	<u>Qty</u>	<u>Unit Net Price</u>	<u>Key Word</u>	<u>Old Part No.</u>	<u>Instructions- Disposition</u>
AWE7133-13	2	\$10.60	Hinge Assy	AWE7133-11	Discard

(2) Parts and material to be procured from operator's stock or sources indicated.

<u>New Part No.</u>	<u>Qty</u>	<u>Key Word</u>	<u>Old Part No.</u>	<u>Instructions- Disposition</u>
AN960D8	8	Washer		
MS21042L08	4	Nut		
MS35335-31	4	Washer		
NAS5302-6	4	Screw	2656012-10-8	Discard
SLE3009 A/B	As Req'd	Casting Compound		1/
SL607-08-7S	4	Insert		2/
1/ May be purchased from: Dalco Industries 13703 Cordary Avenue Unit #6 Hawthorne, California 90250				FSCM 51532
2/ May be purchased from: Shur-Lok Corporation 1300 East Normandy Place Santa Ana, California 92702				97393

NOTE: FSCM indicates Federal Supply Code for Manufacturers.

B. The basis for the following material data is per spares.

None.

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